



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,695	06/18/2001	Hirokazu Hoshino	108269-00006	8597

7590 07/26/2005  
ARENT FOX KINTNER PLOTKIN & KAHN, PLLC  
1050 Connecticut Avenue, N.W., Suite 600  
Washington, DC 20036-5339

EXAMINER	
LEMMA, SAMSON B	
ART UNIT	PAPER NUMBER
2132	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

47

## Office Action Summary

Application No.

09/881,695

Applicant(s)

HOSHINO, HIROKAZU

Examiner

Samson B. Lemma

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### ***DETAILED ACTION***

1. This office action is in replay to an amendment filed on April 28, 2005.  
**The independent claim 1** has been amended and new claim 6 has been added and **claims 1-6** are pending.
2. Examiner has acknowledged and consequently withdraws the objection previously made to the specification and drawing due to some informalities as all the objections are properly corrected by the applicant.
3. Examiner has also acknowledged and consequently withdraws the 112 rejection previously made to some of the claims as all of them are properly corrected by the applicant.

### ***Response to Arguments***

4. Applicant's arguments with respect to **claims 1-6** have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Art Unit: 2132

6. **Claim 1** is rejected under 35 U.S.C. 102(a) as being anticipated by **Diamant, Erez.**

(hereinafter referred to as **Diamant**) (WO 99/42915) (International Publication Date 08/26/1999)(Provided with IDS).

7. **As per claim 1, Diamant discloses** a switch connection control apparatus for channels, which is interposed between a first channel of an external side. (figure 14, 1142, 1136 and page 33, lines 6-8) and a second channel of an internal side (figure 14, 1140, 1134; page 33, lines 10-11) in order to physically separate the external side and the internal side (figure 1) (**As shown on figure 1, the external or public network/first channel is physically separated from the internal side or second channel or secured network**) comprising:

A first switch for short-circuiting and releasing the first channel of the external side.(figure 1, 1142 & 1136; page 34, lines 7-17)

A second switch for short-circuiting and releasing the second channel of the internal side; [figure 1, 1140 & 1134; page 33, lines 27- page 34, line 6)

A switch control section [figure 14, 1122] that outputs a control signal for exclusively short-circuiting any one of said first and second switches and for exclusively releasing the other one of said first and second switches.[page 33, lines 27-page 34, line 17] (**A**

**switch connection control apparatus is interposed between channels or between the internal network/secured network and the external network or internet or public**

**network and exclusively selects a connection of one channel, either the internal**

**network or the external network but not both at the same time as explained on page**

**33, line 27-page 34, line 17).**

Wherein said first switch and second switch always operates in a seesaw type for short-circuiting and releasing the first channel and the second channel respectively.

[page 33, lines 27- page 34, line 17]

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claim 2-6** are rejected under 35 U.S.C. 103(a) as being anticipated by **Diamant, Erez.** (hereinafter referred to as **Diamant**) (WO 99/42915) (International Publication Date 08/26/1999)(Provided with IDS) in view of **Hironori Wakayama.** (Hereinafter referred as **Wakayama**) (U.S. Patent No 6,026,502)

10. **As per claim 2, Diamant discloses** a switch connection control apparatus [figure 14, 1122] further comprising:  
A main control device for conducting and control of data.[figure 14, 1122] A first buffer connected to the first channel. [figure 1, 1128]  
A second buffer [figure 14, 1130] connected to said main control device [figure 14, 1122] for storing a request or wherein first switch [figure 14, 1142] is for short-circuiting and

Art Unit: 2132

releasing said first buffer [figure 14, 1128] and said second buffer [figure 14, 1130] on the first channel [figure 14, 1136] and see also [page 33, lines 27- page 37, line 17]

A second switch for short-circuiting and releasing said main control device and a second channel [figure 14, 1122; 1140 and 1134]

A switch control section that outputs a control signal for in accordance with the main control device. [figure 14, 1122 and page 33, lines 25-29 and page 34, lines 7-9]

**Diamant** does not explicitly disclose

- a control device conducting a certification.

However, in the same field of endeavor, **Wakayama** discloses

- A switch connection control apparatus for channels, (column 2, lines 11-30; figure 1, ref. Num "27" and ref. Num "30"), comprising:

- A main control device **for conducting a certification and control of data**; (Column 2, line 19-36; column 3, lines 25-45; column 4, lines 24-47; figure 1, reference "DATA PUMP FILTER", ref. Num "27" and ref. Num "30") (The "DATA PUMP FILTER" shown on figure 1, reference "DATA PUMP FILTER" is comprises of two data pump namely the data pump "27" and "30" and is met as "the main control device" and is explained on column 3, lines 25-lines 45. It conducts certification or virus removal and control of data of the request by checking the existence of virus in the request when the data is found to be actually doubtfully contaminated with virus as explained on column 4, lines 31-37. The request could come from either direction, that is, it is either coming from the internal network or server or the external network side or internet. The request or the data is examined and certified by erasing the virus if there is any at the controlling devices, namely the data pump filters "27" and "30" by using the "ANTI-VIRUS PROGRAM PHOTOCOUPLER CONTROL SYSTEM". Once the virus is removed

Art Unit: 2132

the appropriate switch is exclusively turned on for transmitting the request or data from the requested network to the requesting network as explained on column 4, lines 24-47)

- A first buffer connected to a first channel; (The first buffer is connected to the external network 2 as shown on provided figure 5 by the applicant. **Wakayama** discloses that the first buffer which is met "RAM 24" which is connected with the external network or first channel which is met the "INTERNET 23" as shown on figure 1)
- A second buffer connected to said main control device for storing a request or data; ("RAM 29" which is met a second buffer is connected to the "DATA PUMP FILTER" which is met as main control device).
- A first switch for short-circuiting releasing said first buffer and said second buffer; (figure 1, ref. Num "33" and ref. Num "34") ("short-circuiting releasing" is corrected as short-circuiting and releasing. A first switch which is met the switch shown on figure 1, ref. Num "33" or ref. Num "34" is used for short-circuiting and releasing the first buffer which is met ref. Num "24" shown on figure 1).
- A second switch for short-circuiting and releasing said main control device and a second channel; (figure 1, ref. Num "35" and ref. Num "36") (Second channel is met the internal network or the "server" and switch "35" or switch "36" is used for short-circuiting and releasing said main control of device or "DATA PUMP FILTER" in particular the "ANTI-VIRUS PROGRAM PHOTOCOUPLER CONTROL SYSTEM "30" and the second channel or server.) and
- A switch control section that outputs a control signal for exclusively short-circuiting any one of said first and second switches in accordance with the main

Art Unit: 2132

control device. (Column 2, lines 19-23; Figure 1, ref. Num "DATA PUMP FILTER"; ref. Num "33" and "34" ; and ref. Num "35" and "36")

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to combine the features of conducting certification as per teaching of **Wakayama** into the the method as taught by **Diamant** in order provide secure transmission.[ see **Wakayama** column 4, lines 31-37]

11. **As per claim 3, the combination of Diamant and Wakayama discloses** the switch connection control apparatus as applied to claim 2 above. Furthermore **Wakayama** discloses the apparatus, wherein a first buffer includes certification means for verifying a correctness of a request or data from a first channel. (Column 3, lines 19-24 and column 3, lines 31-38) (first channel is met as described above the external network or the "internet 23" as shown on figure 1 and the first buffer is met the "RAM-1" shown on figure 1, ref. Num 24. and the first buffer includes "ANTI-VIRUS PROGRAM" as shown on figure 1, in the link "keeper reference 20" to verify the correctness of the a request or data from the internet or the first channel.)

12. **As per claim 4, the combination of Diamant and Wakayama discloses** the switch connection control apparatus as applied to claim 2 above. Furthermore **Wakayama** discloses the apparatus, wherein a main control device includes certification means for verifying a correctness of a request or data from a second channel.(Figure 1, reference Num "30") (The main control device which is interpreted by the office as the "DATA PUMP FILTER" consists of unit "27" and unit "30" as shown on figure 1. Each unit or data pump filter 27 and 28 has ANTI-VIRUS PROGRAM PHOTOCOUPLER CONTROL SYSTEM for verifying the correctness a request and when the data is found to be actually or doubtfully contaminated with viruses it will be deleted before transmitted as explained on column



Art Unit: 2132

4, lines 31-37. The main control device, unit "30" includes a certification means for verifying a correctness of the a request or data from a second channel or the server)

13. **As per claim 5 and 6, the combination of Diamant and Wakayama discloses** the switch connection control apparatus as applied to claim 2 above. Furthermore **Wakayama** discloses the apparatus, further comprising:

- A third buffer disposed between said main control device and said second switch for storing a request or data; (Ref. Num "39") (As shown on figure 1, buffer "39" is disposed between the main control device which is interpreted as unit "27" and the second switch which is switch "35")
- A fourth buffer disposed between said second channel and said second switch for storing a request or data. (Ref. Num "40" or ref. Num "41") (a fourth buffer which is met either buffer "40" or "41" shown on figure 1, is disposed between said second channel which is met the "Server" and second switch which is met switch "35" for storing a request or data as explained on column 5, lines 47-59)

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO-Form 892).

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2132

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

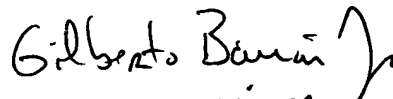
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4: 30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**SAMSON LEMMA**

S.L.

**July 22, 2005**

GILBERTO BARRON JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

Application/Control Number: 09/881,695

Page 10

Art Unit: 2132